

REMARKS

These remarks are in response to the Office Action mailed November 10, 2003. Claims 2 and 32 have been canceled without prejudice to Applicants' right to prosecute the canceled subject matter in any divisional, continuation, continuation-in-part, or other application. Claims 1, 3-7, 16-17, 26-27, 30-31, 33-37, 44, 47-48, 57-58, and 62 have been amended. The amendments to the claims are to correct antecedent basis for certain claim terms. New claims 63-66 have been added. The new claims are supported throughout the specification and claims as originally filed. No new matter is believed to have been introduced.

Applicants acknowledge, with thanks, the Examiner's indication that claims 2-4, 11-16, 18, 19, 21, 22, 26, 27, 30, 32-34, 41-44, 47, 49, 50, 52, 53, 57, 58, and 60 comprise allowable subject matter. The subject matter of these claims is retained.

I. REJECTION UNDER 35 U.S.C. §112

Claims 24 and 55 stand rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the enablement requirement. Applicants respectfully traverse this rejection.

The Office Action alleges that it would be unclear to one of skill in the art how one could determine whether a change in pKa has occurred based on a change in mass of the sensor. Applicants respectfully direct the Examiner to paragraph 21, (page 6-7) which teaches that a change can result in a change in resonance. Changes in resonance result from a change in mass of a sensor. Resonance detection systems are known (see, e.g., Ricco et al, "Surface Acoustic Wave Chemical Sensor Arrays: New

Chemically Sensitive Interfaces Combined with Novel Cluster Analysis to Detect Volatile Organic Compounds and Mixtures," Accounts of Chemical Research, vol. 31, No. 5, 1998, pp. 289-296).

Applicants respectfully submit that one of skill in the art would be able to determine whether a change in the pKa occurs by detecting a change in mass based upon resonance techniques known in the art. Thus, the specification is enabling based upon the disclosure and the knowledge generally available to one of skill in the art. Accordingly, Applicants respectfully request withdrawal of the rejection.

## II. REJECTION UNDER 35 U.S.C. §102

Claims 1, 5-10, 17, 20, 23, 25, 28, 29, 31, 35-40, 45, 46, 48, 51, 54, 61, and 62 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by Pringsheim et al., (Analytica Chimica Acta 357 (1997) pp. 247-252). Applicants respectfully traverse this rejection.

Claims 1 and 31 have been amended to include the allowable subject matter of claims 2 and 32, respectively. Accordingly, claims 1 and 31 (the independent claims) are allowable along with the claims that depend therefrom. In addition, new claims 63 and 64 are directed to poly(aniline boronic acid) polymers and claims 65 and 66 are directed to responses including changes in electrochemical potential, changes in conductivity, changes in impedance, changes in mass, and any combination of the foregoing. Pringsheim et al. do not teach or suggest poly(aniline boronic acid) polymers, nor does the reference teach or suggest measuring changes in electrochemical potential,

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conductivity, impedance or mass. Rather Pringsheim et al. teach only the measuring of optical changes.

Thus, Applicants submit that the pending claims are novel and allowable. Applicants respectfully request withdrawal of the §102 rejection.

### III. REJECTION UNDER 35 U.S.C. §103

Claims 56 and 59 stand rejected under 35 U.S.C. §103 as allegedly unpatentable over Pringsheim et al. in view of Kikuchi et al. (Analytical Chemistry, 1996, 68:823-828).

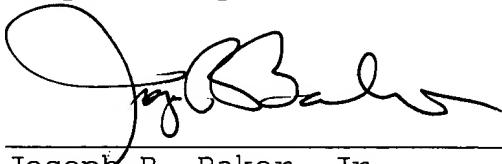
Applicants respectfully submit that the independent claims set forth herein are novel and non-obvious over Pringsheim et al. in view of Kikuchi et al. Accordingly, the §103 rejection may be properly withdrawn.

Enclosed is a \$190 check for excess claim fees. Please apply any other charges or credits to deposit account 06-1050.

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Respectfully submitted,



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